FOREIGN BODIES IN BRAIN:
Presentation to the Psychiatric Facility

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INTRODUCTION

Head trauma is an important neuro-surgical emergency involving concussion, contusion and laceration of the brain matter. Its complication and its management depend upon whether it is penetrating or non-penetrating injury. Patients present with neurological as well as neuropsychiatric symptoms diagnosed on the basis of investigations like CT scan, MRI, and angiography, which can detect intra-cerebral hematoma, cerebral contusion, intraventricular hemorrhage, pneumo-cephalus, brain stem lesions and carotid sinus fistula. Penetrating injury can occur with or without fracture of skull. Different types of intra cerebral foreign bodies can be found like metallic pieces, splinters of missiles, pieces of grenade and bomb, wooden pieces and different other articles.¹,² Site of foreign body in brain is very important in the management and prognosis.

Patients may remain symptom free for many years with foreign body in brain.³,⁴ A case with 48 years of symptom free interval has been reported with foreign body and presenting with brain abscess.⁴,⁵ A similar case of cerebral injury by metallic object without fracture of skull passing through the supraorbital fissure with ten years late onset of complications was reported by Kasamo S et al.²

CASE REPORT

A 49 years old man got facial and penetrating cerebral injuries after a bomb blast. He remained unconscious for 24 hours and was managed by neurosurgeons and dental surgeons. Apart from many small metallic pieces in the subcutaneous tissue, facial muscles, he had multiple intra cerebral metallic pieces. After a year of management he remained well without any neurological or neuro-psychiatric complication except loss of vision in left eye.

After 11 years of this incidence at the age of 49 years, he developed cognitive impairment, a seizure disorder along with co-morbid depressive symptoms. He was referred to psychiatry unit for medical opinion regarding fitness to continue the job and treatment. On clinical assessment patient had depressive cognition of mild to moderate severity with biological dysfunction with out psychosis and suicidal intent. CT brain revealed multiple pieces in the brain without cerebral atrophy. Other physical investigations including EEG were unremarkable. His IQ assessment on WAIS-R shows score of 60 with weakness in almost all areas. On BGT he got score of 137 and findings suggestive of organic intracranial pathology.

He was started fluoxetine20 mg daily with divalproex sodium 500mg /day that was increased to 1 gm/day and since then he is seizure free.
The neurological and psychological manifestations of foreign body brain can be manifested much later in life as well after the incidence. The presentation may be in cognitive domains, affective symptoms, psychosis and seizure disorders and or secondary complications of foreign bodies like brain abscess.

Our case also had affective symptoms, seizure disorder and cognitive impairment as a late onset complication of foreign bodies brain. In the management of such cases a multi-disciplinary approach, vigilance and follow up is required for better outcome and prognosis.

REFERENCES